



# Audit Report

OFFICE OF THE INSPECTOR GENERAL

**REPLACEMENT COMMISSARY  
CONSTRUCTION REQUIREMENTS**

Report No. 95-273

June 30, 1995

20000107 083

**Department of Defense**

**DISTRIBUTION STATEMENT A**

Approved for Public Release  
Distribution Unlimited

AOI 00-04-0888

### **Additional Copies**

Copies of the report can be obtained from the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate, (703) 604-8937 (DSN 664-8937) or FAX (703) 604-8932.

### **Suggestions for Future Audits**

To suggest ideas for or to request future audits, contact the Planning and Coordination Branch, Audit Planning and Technical Support Directorate, at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

Inspector General, Department of Defense  
OAIG-AUD (ATTN: APTS Audit Suggestions)  
400 Army Navy Drive (Room 801)  
Arlington, Virginia 22202-2884

### **Defense Hotline**

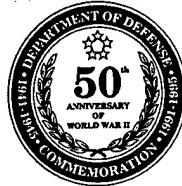
To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@DODIG.OSD.MIL; or by writing the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

### **Acronyms**

DASD(PSF&E)	Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education
DCB	Defense Commissary Board
DeCA	Defense Commissary Agency
AFB	Air Force Base



**INSPECTOR GENERAL**  
**DEPARTMENT OF DEFENSE**  
**400 ARMY NAVY DRIVE**  
**ARLINGTON, VIRGINIA 22202-2884**



June 30, 1995

**MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF DEFENSE  
(PERSONNEL SUPPORT, FAMILIES, AND  
EDUCATION)  
DIRECTOR, DEFENSE COMMISSARY AGENCY**

**SUBJECT:** Audit Report on Replacement Commissary Construction Requirements  
(Report No. 95-273)

We are providing this audit report for review and comment. The report discusses commissary construction planning by the Defense Commissary Agency and is the sixth and final report from this audit. We considered management comments on a draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all unresolved issues be resolved promptly. DeCA comments on Recommendations A.2.a., A.2.c., B.1., and B.2. are fully responsive and no further comments are required. As a result of management comments and our discussions with personnel from the Office of the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education and DeCA, we revised Recommendations A.1. and A.2.b. We request that the Deputy Assistant Secretary provide additional comments on Recommendation A.1. No further comments are required on Recommendation A.2.b. In response to the draft Recommendation B.3., DeCA revised five commissary construction projects using corrected sales information. In response to the final report, we request that DeCA provide comments on the potential monetary benefits. We request all comments by August 30, 1995.

The Director, DeCA, has directed his staff to perform a comprehensive review of commissary sizing criteria and sales projection methodologies with the objective of developing a new commissary sizing model. The ongoing efforts of DeCA to establish a comprehensive and well-documented commissary construction program, when implemented, should provide the oversight necessary to preclude the construction of uneconomical or unnecessary commissary stores.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Michael A. Joseph, Audit Program Director, or Mr. Timothy J. Tonkovic, Audit Project Manager, at (804) 766-2703. See Appendix H for the report distribution. The audit team members are listed on the inside back cover.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

## **Office of the Inspector General, DoD**

**Report No. 95-273**  
(Project No. 3LA-0069)

**June 30, 1995**

### **REPLACEMENT COMMISSARY CONSTRUCTION REQUIREMENTS**

#### **EXECUTIVE SUMMARY**

**Introduction.** This is our sixth and final report on the Defense Commissary Agency (DeCA) construction program. To support commissary patrons, DeCA has constructed or plans to construct and renovate 67 commissaries between FY's 1993 and 1997 at a total project cost of about \$472.2 million. We have issued five reports on the process that DeCA used to justify individual replacement commissary construction projects for FYs 1993 and 1994. For three of the projects, DeCA agreed to consider renovation as an alternative to new construction and now requires that an economic analysis be completed for each project. To support those initiatives, DeCA recently initiated new planning and programming procedures for commissary construction projects.

**Objectives.** The objective of the audit was to determine whether construction of DoD commissaries was justified and cost-effective. We also evaluated the adequacy of management controls for planning and validating commissary construction requirements.

**Audit Results.** DeCA planned to construct five new commissaries in FYs 1993 and 1994, at an estimated cost of \$65 million, that were not needed or that were sized in excess of commissary patron requirements. By justifying and sizing commissary projects accurately, DeCA could save commissary surcharge funds and increase the availability of funds for other patron services. Although benefits could be realized by implementing the recommendations, we could not quantify the amount because the amount will depend on future management decisions (Finding A). Audit Project No. 5LF-0013, "DeCA Design and Construction Process," will further address the cost-effectiveness of the DeCA design and construction program.

Since October 1991, DeCA has built at least six commissaries at Army and Air Force installations that exceeded requirements because established sizing criteria allowed more square footage than was needed. As a result, DeCA spent commissary surcharge funds for unnecessary square footage. DeCA promptly implemented our recommendations, which resulted in four of its FY 1995 commissary projects being revised. The revisions will allow DeCA to put to better use about \$2.3 million of Commissary Surcharge Collections Funds (Finding B).

The audit identified material management control weaknesses. Management controls were not effective to ensure that commissary construction requirements were justified using accurate, complete, and up-to-date documentation and that appropriate considerations were used to determine commissary sizes. See Part I for the management controls assessed and Finding A for a discussion of the management control weaknesses identified.

See Part II for a discussion of the audit results and Appendix F for a summary of the potential benefits resulting from the audit.

**Summary of Recommendations.** The audit recommendations are intended to supplement the new DeCA procedures to achieve effective and efficient commissary facility planning. We recommend improving procedures to review the information used to support project requirements. We recommend updating existing procedures to prepare accurate, complete, and up-to-date project documentation; validate that information to make sure proposed projects satisfy minimum commissary patron requirements; and consider extended operating hours as an alternative to construction. We also recommend determining a space allowance for retail and warehouse tobacco product storage and that commissary requirements at Army and Air Force installations be based on sales projections that do not include troop issue and tobacco sales. Additionally, we recommend using corrected sales information to resize, as appropriate, commissary construction projects.

**Management Comments.** The Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education stated that the primary role of her office is not to validate, but to provide review, oversight, and approval of projects after they have been validated by DeCA.

Although not required to comment on the recommendation to the Deputy Assistant Secretary, DeCA stated that new procedures have been implemented to coordinate, oversee, and review the commissary construction process. Additionally, DeCA agreed to base project requirements on accurate and complete project information, and to ensure that alternatives to new construction are considered. DeCA also agreed to exclude tobacco and troop issue sales from sales projections, and resize, as appropriate, commissary construction projects. DeCA stated that it has recalculated sales projections for over 115 commissaries, and updated economic analyses to reflect current conditions. As a result of its efforts, DeCA identified about \$2.3 million in quantifiable monetary benefits associated with reducing the sales area of four commissary projects. See Part II for a summary of management comments and Part IV for the complete text of management comments.

**Audit Response.** Based on management comments, we revised the recommendation to review and coordinate the commissary construction program. We also modified the recommendation to consider extending operating hours as an alternative to construction by eliminating the reference to Commissary Surcharge Collections Funds. We will continue to work with the DeCA staff to make additional improvements to the process for validating construction requirements.

Four commissary projects are currently in the followup and mediation process with the Inspector General, DoD. The four projects, at Fort Bragg, Naval Air Station Pensacola, Fitzsimons Army Medical Center, and Hanscom Air Force Base should not proceed until all outstanding audit issues have been resolved. We will evaluate the DeCA new procedures during the followup and mediation process for the four projects.

We request additional comments to the final report from the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education on the revised recommendation by August 30, 1995. Based on the DeCA actions to resize four projects, we estimate that DeCA can put to better use approximately \$2.3 million of Commissary Surcharge Collections Funds. Accordingly, we request comments from DeCA on the potential monetary benefits, including an estimate of cost reductions at Little Rock Air Force Base, by August 30, 1995.

# **Table of Contents**

---

<b>Executive Summary</b>	i
<b>Part I - Introduction</b>	
Background	2
Objectives	3
Scope and Methodology	3
Management Control Program	4
Prior Audits and Other Reviews	5
Other Matters of Interest	5
<b>Part II - Findings and Recommendations</b>	
Finding A. Commissary Construction Requirements	8
Finding B. Commissary Sizing Criteria	19
<b>Part III - Additional Information</b>	
Appendix A. Prior Audits and Other Reviews	24
Appendix B. FY 1995 Through FY 1997 DeCA Major Construction Program	27
Appendix C. Appropriated Fund Military Construction Approval Process	29
Appendix D. Defense Commissary Agency Construction Approval Process	32
Appendix E. Actual and Corrected Monthly Commissary Sales and Their Effect on Commissary Space	34
Appendix F. Summary of Potential Benefits Resulting From Audit	35
Appendix G. Organizations Visited or Contacted	36
Appendix H. Report Distribution	38
<b>Part IV - Management Comments</b>	
Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education Comments	42
Defense Commissary Agency Comments	43

## **Part I - Introduction**

## **Introduction**

---

## **Background**

**Mission.** The mission of the Defense Commissary Agency (DeCA) is to provide an efficient and effective worldwide system of commissaries for the not-for-profit sale of groceries and household supplies at the lowest practical price to members of the Military Departments and their dependents, and to other authorized patrons. The commissary system provides one of the most visible and valued benefits for active duty and retired military members and their dependents.

**Commissary Construction Process.** The DeCA regions develop and prioritize project requirements and forward them to the DeCA Headquarters at Fort Lee, Virginia. At DeCA Headquarters, the facilities directorate is responsible for the prioritizing, planning, and programming of the DeCA major construction program. Major commissary construction projects are those costing more than \$500,000. After the Director, DeCA, approves the annual construction program, it is presented to the Construction Requirements Review Committee and the Defense Commissary Board (DCB) for review and approval.

The Construction Requirements Review Committee (the committee), chaired by the DeCA Director of Facilities (as a nonvoting member), is a multi-Service committee of the DCB that reviews the prioritization of the DeCA proposed commissary construction projects. The committee meets twice a year to review major construction projects, review prioritization of needs and make recommendations to the DCB relative to construction issues. Committee membership includes mid-level officer and civilian personnel from the logistics and morale, welfare, and recreation operational areas. To accomplish the mission of the committee, members represent their Service with regards to recommendations concerning commissary construction and advise other committee members of force structure changes.

The DCB, chaired by the Director, DeCA, consists of a representative of the Under Secretary of Defense for Personnel and Readiness, a representative from the Joint Chiefs of Staff, a senior flag military officer and senior enlisted representative from each of the Military Departments and other representatives, as determined by the Director, DeCA. The DCB members represent the logistics; personnel; and morale, welfare, and recreation operational areas of the Military Departments and OSD. The DCB reviews proposed projects and informs DeCA management of any unforeseen difficulties that may affect the proposed projects. The DCB then provides final approval of the DeCA commissary construction program that will be executed the following fiscal year.

Upon approval by the DCB, the list of proposed commissary construction projects is submitted to the Under Secretary of Defense (Comptroller) as part of the annual surcharge budget process, and to the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education (DASD(PSF&E)) for review, concurrence, and forwarding to Congress. The Force Requirements

and Personnel Subcommittee of the Senate Committee on Armed Services and the Morale, Welfare, and Recreation Panel of the House Committee on National Security (formerly the House Armed Services Committee) review and approve the DeCA commissary construction program and authorize DeCA to obligate surcharge collection funds. Upon congressional approval, the DeCA Design and Construction Division at Lackland Air Force Base (AFB), San Antonio, Texas, awards construction contracts necessary to accomplish the commissary construction program. To implement the commissary construction program, DeCA uses architectural engineering firms to assist in the design and construction management of commissaries.

**Commissary Sizes.** DeCA has established 10 standard design commissary sizes based on average monthly sales, as adjusted to 1982 dollars. Minimum average monthly sales, as adjusted to 1982 dollars, necessary to justify the 10 standard designs range from \$50,000 for a 12,000-square foot commissary to \$4 million for a 100,000-square foot commissary. The sales areas for the 10 standard designs range from 6,000 square feet to more than 58,000 square feet.

**Construction Funding.** Commissary construction costs are paid from the nonappropriated Commissary Surcharge Collections Fund. It is a revolving fund that DeCA maintains by charging commissary patrons a 5-percent surcharge on their purchases. Personnel costs for the staffing at commissary stores are paid from appropriated operations and maintenance funds.

## Objectives

The objective of the audit was to determine whether construction of DoD commissaries was justified and cost-effective. We also evaluated the adequacy of management controls for planning and validating commissary construction requirements.

## Scope and Methodology

**Scope and Selection Process.** We reviewed the policies and procedures applicable to the DeCA commissary construction program and evaluated the planned construction of four commissaries in the continental United States and one commissary in Guam. We selected those 5 projects from a universe of 26 projects for FY 1993 and FY 1994, valued at \$169 million, because they had the highest dollar values in the DeCA commissary construction program. Two of those projects, Fort Bragg and Hanscom AFB, were subsequently moved to the FY 1995 program. We also reviewed the policies and procedures DeCA used to record commissary sales at 23 Army and Air Force commissaries, and evaluated how those sales figures are used to project future sales.

## **Introduction**

---

**Audit Locations and Data Reviewed.** To evaluate the construction review, approval, and execution process, we visited the DASD(PSF&E), DeCA Headquarters; DeCA regions; the DeCA Design and Construction Division; DeCA service centers; and selected commissaries.

We obtained historical sales information and projected sales information, demographic data, minutes of meetings, and other supporting information used to justify the commissary projects. For the five planned commissary construction projects reviewed, we also obtained information on completed economic analyses, inspections, maintenance and repair, proposed site plans, utility costs; and other information used to justify the replacement commissary projects. For the 23 new commissaries DeCA has opened since October 1991, we obtained tobacco and troop issue sales information and other sales, inventory, and accounting information from October 1991 to May 1994.

We also visited staffs of the Military Departments that were responsible for facility planning, personnel management, and implementation of base realignment and closure decisions. The audit did not rely on computer-processed data or statistical sampling procedures. Appendix G lists the organizations visited or contacted during the audit.

**Audit Standards and Time Period.** This economy and efficiency audit was made from October 1993 through December 1994 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls that we considered necessary.

## **Management Control Program**

**Management Controls Reviewed.** We reviewed implementation of the DoD Management Control Program at the DeCA Facilities Directorate as it related to the planning and programming of commissary construction projects. We evaluated the DeCA management controls for planning and programming commissary construction project requirements.

**Adequacy of the DeCA Management Control Self-Evaluation Process.** The DeCA implementation of the DoD Management Control Program for planning and programming of commissary construction requirements was not effective because directives and management control checklists had not been developed to assess the risks inherent in the process. As a result, DeCA did not identify material management control weaknesses that occurred in the process used to plan and program commissary requirements. The DeCA Annual Statements of Assurance for FY 1993 and FY 1994 did not report material weaknesses in the construction management functional area.

**Adequacy of Management Controls.** The audit identified material management control weaknesses as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. As part of the audit

of the DeCA commissary construction program, we issued five reports that discussed the weaknesses related to the procedures and management controls DeCA used to determine commissary sizes. Additionally, DeCA did not have procedures in place to make sure facility planners accurately planned and programmed commissary construction requirements as changes occurred in project scopes.

DeCA Directive 20-1, "Planning and Programming Major and Minor Commissary Construction Projects," October 14, 1994, established management control provisions for commissary construction and should assist in correcting the management control weaknesses discussed in Findings A. We were unable to test the management control provisions because the controls for construction project management were implemented after we completed the audit. Implementation of the recommendations should correct the management control weaknesses.

### Prior Audits and Other Reviews

Five audit reports on individual commissary construction projects were issued between September 1993 and September 1994. The reports addressed the justification for certain replacement commissaries and procedures for programming commissary construction projects. Summaries of the reports are provided in Appendix A.

### Other Matters of Interest

The sales information that DeCA uses to project commissary sales and to size individual commissaries is generally accurate, but needs improvement to prevent oversizing or undersizing of commissaries. DeCA developed a separate sales report, known as the flash sales report, to summarize commissary sales. However, DeCA did not reconcile the accuracy of those reported sales to Reports of Deposit, Store Block Control Journals, and Voucher Register and General Control Resale Reports. DeCA Directive 70-16, "Analysis and Reconciliation of Operations Procedures," July 10, 1992, provides guidance for analyzing and reconciling accounting transaction data between the DeCA bill paying system, the inventory management system, and the official accounting system.

**Flash Sales Report.** In a December 1, 1992, memorandum, the DeCA Director of Resource Management instructed DeCA regions on how to complete the flash sales report. The flash sales report was designed to report individual commissary sales because, in the past, its official accounting system contained sales errors that distorted its official accounting reports. At the end of each month, commissaries are required to submit flash sales reports to their respective regions. The regions, in turn, summarize the individual commissary

## **Introduction**

---

reports and forward the information to DeCA Headquarters. Personnel in the Resource Management Directorate at DeCA Headquarters compile the sales information for all the regions.

**Reconciliation.** We reconciled average monthly flash sales for 23 continental United States commissaries and compared those to sales figures reported by the DeCA official accounting system. The absolute value (understatements and overstatements) of the undefined errors in DeCA reported grocery, produce, and meat sales totaled \$19.1 million from October 1991 to May 1994. We were unable to determine the reasons for the understatements or overstatements because, when errors were found, DeCA personnel made corrections to the flash sales report in the months that errors were found, and not in the month that errors occurred.

**Recording of Coupon Sales at Air Force Commissaries.** Of the 23 commissaries constructed after DeCA was established, 12 were at Air Force installations. Of the 12, 6 overstated coupon sales by \$13 million from October 1991 through May 1994. For reasons we could not determine, those commissaries did not deduct grocery coupon sales from cash grocery sales on the report of deposits as required. Instead, they deducted coupon sales from the grocery, meat, produce, and surcharge sales subtotal portion of the report. When DeCA personnel subsequently reconciled cash sales information, they were unaware that coupon sales had not been deducted from cash grocery sales. As a result, they inadvertently double counted coupon sales in both the cash sales and coupon sales sections on the flash sales report.

The total value of the errors at the 23 commissaries is immaterial when compared to their total October 1991 through May 1994 sales of \$1.7 billion. Therefore, we are not citing this problem as a material management control weakness or including it as part of the findings in this report. However, DeCA management should correct the misreporting of sales information.

## **Part II - Findings and Recommendations**

## Finding A. Commissary Construction Requirements

DeCA planned to construct five new commissaries in fiscal years 1993 and 1994 that were not needed or that were sized in excess of commissary patron requirements. The condition occurred because the OSD and DeCA did not have adequate procedures and management controls to ensure that accurate sales projections and up-to-date personnel information was used to estimate commissary construction requirements. Additionally, DeCA did not sufficiently consider alternatives to new construction. Further, DeCA and program sponsor personnel had not established procedures to review and coordinate the continuing need for commissary construction projects as changes occurred in requirements. By estimating requirements and sizing commissary projects accurately, DeCA could use Commissary Surcharge Collections Funds to support other patron services.

### Background

**Commissary Construction Program.** The DeCA commissary construction program includes renovation of existing commissaries, replacement of old commissaries, and procurement of new equipment. Between FY 1993 and FY 1994, DeCA programmed about \$169 million to renovate or replace 26 commissaries, as summarized in Table 1.

Table 1. FY's 1993 through 1994 Planned Commissary Construction

Fiscal Year	Number of Upgrade Projects	Upgrade Project		New Construction Project Amount (millions)
		Amount (millions)	Number of New Commissary Projects	
1993	10	\$ 51.8	11	\$ 84.0
1994	3	24.4	2	8.6
Total	13	\$ 76.2	13	\$ 92.6

As of October 1, 1994, DeCA planned to spend another \$303.4 million to renovate existing commissaries and to replace old ones. Those projects, planned for FY 1995 through FY 1997, will require about 40 percent of the estimated surcharge collections from that 3-year period and are summarized in Appendix B.

**Commissary Sizing Requirements.** DeCA develops commissary sizing requirements using average monthly sales projections, corrected for inflation to a 1982 base year. Sales projections used to justify commissary construction

## Finding A. Commissary Construction Requirements

projects are derived from a computer-processed mathematical model that calculates the sales trend of an individual store for the last 10 years and projects that trend over the next 5 years. Those projections are then compared to 1 of 10 standard commissary sizes to determine authorized area square footages. The 10 commissary sizes, with the required range of average monthly sales, are shown in Table 2.

Average Monthly Sales	Sales Area (SF)*	Commissary Size (SF)*
\$ 4,050,000 - \$ 5,000,000	58,586	100,000
3,300,000 - 4,000,000	52,939	90,000
2,550,000 - 3,250,000	47,449	80,000
2,050,000 - 2,500,000	40,153	70,000
1,550,000 - 2,000,000	33,541	60,000
1,050,000 - 1,500,000	28,113	50,000
550,000 - 1,000,000	23,226	40,000
350,000 - 500,000	16,877	30,000
150,000 - 300,000	11,112	20,000
50,000 - 150,000	6,004	12,000

\*SF = Square feet.

## Criteria Used to Validate Commissary Construction Projects

DoD Instruction 7041.3, "Economic Analysis and Program Evaluation for Resource Management," October 18, 1972, states that an economic analysis is required for proposals involving a choice between two or more options, even when one option is to maintain the status quo. Additionally, an economic analysis should be updated reflecting significant developments that invalidate or alter the cost-benefit relationships upon which previous decisions were made.

DeCA Directive 20-1, "Planning and Programming Major and Minor Commissary Construction Projects," October 14, 1994, provides guidance on planning and programming DeCA's major and minor construction program. For major construction projects costing over \$500 thousand, the directive provides information used to plan, program and execute commissary construction and involves cost estimating, budgeting, prioritization, and project sizing and siting. The directive corrected several deficiencies in the DeCA commissary construction planning process; however, in our opinion, improvements are still needed in the procedures used to plan, program, and justify commissary requirements.

DoD Form 1391, "Military Construction Project Data," is the principal programming document used for DoD construction projects. It includes

## **Finding A. Commissary Construction Requirements**

---

detailed summary information including descriptions, assumptions, cost estimates, and other pertinent backup information to support the project during the review and approval process.

### **Review of Commissary Construction Requirements**

Based on our review of supporting documentation for 5 of 26 commissary construction projects, we determined that DeCA planned to construct replacement commissaries that were not needed or were sized in excess of commissary patron requirements. All five projects, with a total cost of \$65 million, were oversized because procedures and management controls had not been established to prevent DeCA from using overstated sales projections and out-of-date personnel information to justify the projects. Further, alternatives to new construction were not sufficiently considered for the five projects. Additionally, adequate procedures had not been developed to review and coordinate the need for the projects as changes occurred in requirements.

### **Use of Overstated Sales Projections and Out-of-Date Personnel Information**

**Use of Overstated Sales Projections.** DeCA based the sizes of some replacement commissary construction projects on sales projections that may not materialize. Commissary construction requirements are based on average monthly patron sales projections, corrected to 1982 for inflation. Projected sales include sales to active duty personnel, retirees, dependents, as well as other authorized patrons. Those projections, in 1982 dollars, are compared to 10 standard commissary sizes to determine the authorized commissary square footage.

DeCA used overstated future sales projections to justify some commissary replacement projects, while actual experience generally showed a downward trend. Existing procedures and management controls were not adequate to ensure that accurate sales projections were used to size commissaries. Overstated sales projections caused DeCA to overstate existing commissary space deficiencies, which resulted in overstated project requirements. Overstated sales projections for two of the five projects that we reviewed in the DeCA major construction program are discussed below.

**Naval Station, Guam.** DeCA planned to construct a 60,000-square foot replacement commissary at Naval Station, Guam, for \$17 million. DeCA projected that sales would increase by 5.23 percent annually, from FY 1993 through FY 1997, based on historical experience that included a significant anomaly. From FY 1983 through FY 1984, the Naval Station, Guam, commissary experienced a one-time 47-percent increase in sales. That increase

## Finding A. Commissary Construction Requirements

---

was responsible for the average sales increase of 5.23 percent for the past 10 fiscal years. If the 47-percent 1-year increase in sales had not been included in the computation, the average change in sales would have been approximately zero percent. More fundamentally, any increase in sales was unlikely because of planned personnel reductions. We determined that a 50,000-square foot commissary was sufficient.

**Fitzsimons Army Medical Center, Denver, Colorado.** The size of the 80,000-square foot replacement commissary project (valued at \$11.3 million) at Fitzsimons Army Medical Center was based on projected sales from the existing commissary and sales expected to migrate from the Lowry AFB commissary as a result of the closure of Lowry AFB. To forecast average monthly sales increases from FY 1992 through FY 1996, DeCA used a 10-percent annual increase projection factor, while actual experience, generally, showed a downward trend. From FY 1983 through FY 1991, actual average monthly sales decreased 3.28 percent. A 1-year sales increase of 15.8 percent in FY 1991 was responsible for the average decrease in sales of 3.28 percent for FYs 1983 through 1991. If the 15.8-percent 1-year increase in sales had not been included in the computation, the average percentage decrease in sales would be 6 percent.

**Use of Out-of-Date Personnel Strength Data.** DeCA did not always receive accurate and up-to-date personnel strength projections for determining commissary construction requirements from the Military Departments, and OSD did not assist in ensuring that realistic planning data were provided. The accuracy and reliability of those data are critical to the commissary construction planning process. Active duty and retiree populations and their dependents are the primary users of commissaries and generate the sales used to justify and size new or renovated commissaries. Commissary construction requirements can be changed as a result of:

- o Military Department and Commission on Defense Base Closure and Realignment decisions,
- o homeported ship and aircraft deployment schedules,
- o the number of spouses and children of active duty personnel,
- o retired personnel in nearby geographic areas,
- o military transient student populations, and
- o Realignments of DoD Reserve Force units and personnel.

The Fitzsimons Army Medical Center, Denver, Colorado, again illustrated a planning problem. DeCA did not have current information on the planned DoD active duty personnel reductions and realignments that affect the planned 80,000-square foot replacement commissary. As of August 1994, 9,272 active duty personnel resided within a 30-mile radius of Fitzsimons Army Medical Center. After closure of Lowry AFB, approximately 4,232 personnel will remain in the Fitzsimons Army Medical Center catchment area. After that

## Finding A. Commissary Construction Requirements

---

reduction, a 70,000-square foot commissary would satisfy the active duty personnel, retirees, and dependents. If the recent DoD recommendation to close the Fitzsimons Army Medical Center is approved, the requirement will be even less.

**Measures to Improve Planning Data.** DeCA Directive 20-1 now requires DeCA facility planners to consider the effect of military and retired personnel demographic increases or decreases on sales projections and subsequent store sizes. It also requires DeCA facility planners to consider base realignment and closure issues, commissary consolidations, and geographic locations for impacts on final commissary sizing. Those management initiatives and close coordination with the Construction Requirements Review Committee should improve the reliability of the sales information used to justify and size commissary projects.

## Alternatives to Construction

DeCA planned to construct five new commissaries that were not needed, in part, because it did not adequately consider alternatives to new construction. For every commissary construction project, various alternatives to new construction may exist, yet, DeCA procedures were not established to ensure that all viable alternatives were considered. Alternatives to new construction may include:

- o extension of commissary operating hours;
- o renovation of existing commissary space, to include existing excess commissary warehouse space;
- o conversion of existing facilities to commissaries; and
- o construction of additions to existing facilities.

**Extension of Operating Hours.** Extending commissary operating hours or days of operation is an alternative to new construction. DoD Directive 5105.55, "Defense Commissary Agency," November 9, 1990, states that DeCA shall provide and operate facilities under standards consistent with those used for commercial food stores. Commercial food stores operate an average of 117 hours per week. The current average for commissary store operations is 46 hours per week. DeCA could satisfy commissary space shortfalls if it considered extending operating hours or days of operation as an alternative to new construction or expansion. For example:

o Sales per hour for DeCA commissaries average about \$6,540. By remaining open an additional 20 hours per week, some commissaries could, we believe, support additional weekly sales of about \$105,000, in 1982 dollars. The 20-hour weekly increase equates to an increase of about 87 operating hours

## Finding A. Commissary Construction Requirements

---

per month. As a result, commissaries may be able to support additional monthly sales of \$453,000, in 1982 dollars, without a corresponding increase in the size of the commissary.

Certain DeCA commissaries have already demonstrated the ability to increase service to their patrons and generate increased sales by extending their hours.

o The Naval Air Station Pensacola commissary experienced a 10.73-percent increase in average monthly sales from FY 1986 to FY 1987. The commissary changed its operations from 5 days to 7 days a week which contributed to the increase in sales.

o In September 1993, commissary operations at McClellan AFB increased from 60 hours per week to 71 hours per week. After closure of nearby Mather AFB, average monthly sales increased 37 percent, without a corresponding increase in the size of the commissary.

**Renovation of Commissaries.** DeCA did not sufficiently consider renovation or conversion of existing excess commissary space, to include existing excess commissary warehouse space, as an alternative to new construction. DeCA can minimize its construction costs by modifying and continuing to use existing facilities. For example, at Hanscom AFB, DeCA planned to construct a 70,000-square foot commissary. In February 1993, personnel at DeCA Headquarters evaluated the Hanscom AFB commissary requirements and facilities and recommended new construction instead of renovation. Although the cost of renovation and expansion of the existing commissary to meet requirements would save about \$3.8 million and would cost 55 percent of new construction, DeCA recommended that a new commissary be built because the existing commissary was not conducive to efficient and effective operations. DeCA did not perform an economic analysis in compliance with DoD Instruction 7041.3; therefore, comprehensive comparisons of the costs for renovation to the costs for new construction were not available.

Another location where conversion is less expensive than new construction, is Fort Bragg, North Carolina. Sales at Fort Bragg support a 100,000-square foot commissary. DeCA planned to construct a 100,000-square foot commissary at Fort Bragg in addition to the existing 91,000-square foot main commissary. By January 1995, all continental United States commissaries will receive grocery and consumable supply items by commercial frequent delivery services. As a result, the need for the 72,000-square foot warehouse attached to the existing main commissary will be minimized and will be available for a 9,000-square foot expansion of the main commissary versus construction of a second 100,000-square foot commissary.

**Economic Analysis.** A comprehensive economic analysis, in accordance with DoD Instruction 7041.3, should include an on-site inspection of existing facilities to identify any required renovation or repair. DeCA Directive 20-1 requires that an economic analysis be prepared that includes an analysis of a commissary's age, accessibility, functionality, physical condition and present

## Finding A. Commissary Construction Requirements

---

site constraints. To assist in justifying a new commissary site and size, the economic analysis should also include an engineering evaluation and facility inspection.

The economic analysis is a documented process used to assist facility planners in making the most effective use of construction resources. During facility planning and programming cycles, the basic economic analysis should be revisited to determine whether the precepts upon which it is based are still valid. If the results of the updated analysis show that an alternative to the proposed project is the most economical, the project should be reevaluated to include the most cost beneficial alternative.

**Economic Analysis Manual.** Prior Inspector General, DoD, audits of medical construction projects reported that economic analyses were not in compliance with DoD guidance, contained faulty assumptions, and were based on out-dated information and inappropriate costs. Partially as a result of those audits, the Economic Analysis and Management Support Directorate of the Office of the Assistant Secretary of Defense (Health Affairs) established a working group to update the economic analysis manual used to evaluate medical military construction proposals. This effort offers a useful model.

On December 12, 1994, the Office of the Assistant Secretary of Defense (Health Affairs) issued the draft Economic Analysis Procedures Manual. The manual describes steps that provide a logical structure for performing an economic analysis and for documenting the results in project planning documentation. The steps include:

- o a detailed examination (including an engineering evaluation) of the existing facility as well as other facilities in the area,
- o a determination of requirements of uniformed Service beneficiaries,
- o an evaluation of alternative scenarios for satisfying the requirements of uniformed Service beneficiaries,
- o a determination of space requirements for each of the alternative scenarios,
- o development of a construction solution for each scenario that satisfies the requirements of uniformed Service beneficiaries while taking into account the condition of the existing facility,
- o preparation of cost estimates, and
- o an analysis of total costs for each of the scenarios to determine the most "cost effective" solution.

Use of the procedures developed by the Assistant Secretary of Defense (Health Affairs) would enable the DeCA facility planners to determine the most cost-effective method of serving commissary patrons in a specified area.

## Finding A. Commissary Construction Requirements

---

We recognize that the economic analysis is only one of the inputs to the decision making process and that DeCA facility planners must still interpret the economic analysis result along with other factors such as morale, environmental constraints, and other considerations. In our opinion, DeCA should establish economic analysis procedures similar to those established by the Assistant Secretary of Defense (Health Affairs). Such procedures would document that economic factors bearing on a decision have been fully considered.

### Review of Project Requirements

Planned commissary construction exceeded requirements, in part, because DeCA facility planners had not validated the need for projects in the early planning stages. Additionally, DASD(PSF&E) personnel had not reviewed project information or coordinated project requirements with the Services to make sure changes had not occurred that affected commissary project requirements.

The commissary construction planning and programming process was less rigorous than DoD procedures used to approve appropriated fund construction projects. Procedures were not in place to ensure that information used to justify and support commissary construction projects was prepared and reviewed prior to project placement in the DeCA construction program.

**DeCA Commissary Planning and Programming Process.** Three years prior to the year of planned construction, DeCA regional and headquarters personnel develop a prioritized list of proposed construction projects that are included in DeCA's preliminary construction program. The program identifies location, total estimated cost, and whether the project is for new construction or renovation. After the Director, DeCA, approves the proposed construction program, initial budgeting, prioritization, and sizing are also accomplished. Two years prior to the year of planned construction, the Construction Requirements Review Committee and the DCB review the list of proposed projects. At this stage in the review process, DeCA personnel develop the DoD Form 1391, supporting justifications and initial budgets for the projects.

Established procedures for appropriated fund construction projects require that thoroughly developed and complete supporting information, including the DoD Form 1391, be developed in the early planning stages prior to project review by activity and program sponsor personnel. Those procedures assist activity and program sponsor personnel in evaluating the proposed project, the requirement, the current situation, and the impact on the installation if the project is not provided. For purposes of comparison, the DoD appropriated fund construction approval process and the DeCA process are summarized in Appendix C and Appendix D, respectively.

## **Finding A. Commissary Construction Requirements**

---

**Defense Commissary Board and Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education Review Process.** The DeCA commissary construction process includes a limited review of its proposed commissary construction program by the DCB. The DCB does not analyze information used to support project requirements to ensure that projects are necessary to satisfy commissary patron requirements.

Procedures were recently implemented to ensure that personnel from the DASD(PSF&E) review and approve information used to support project requirements. DeCA Directive 20-1 states that after the DCB approves the DeCA planned commissary construction program, copies of each project's DoD Form 1391 are to be consolidated into the DeCA Construction Report and forwarded to the DASD(PSF&E) for review and concurrence.

In our opinion, program sponsor personnel should be involved early in the development of the DeCA commissary construction program. DASD(PSF&E) personnel should review and coordinate, in conjunction with Service personnel, information used to justify and support commissary construction to ensure requirements accurately represent patron and DoD force structure projections. DASD(PSF&E) personnel should also ensure that corrective action on commissary construction requirements is initiated for any projects where problems are identified prior to project approval.

## **Conclusion**

The DeCA commissary construction program is under way at a time when the patron base is declining, forces are being restructured and realigned, and DoD is attempting to reduce its overall infrastructure. Commissaries should be built only when requirements are satisfied in the most economical manner and when other alternatives are impractical or uneconomical. Accurate and up-to-date project documentation should be used to justify commissary construction. DeCA will need the assistance of the Military Departments and the Office of the Secretary of Defense to keep commissary construction plans in consonance with the changing force structure and basing plans.

## **Recommendations, Management Comments and Audit Response**

**Revised Recommendation.** As a result of comments from the DASD(PSF&E) and DeCA, we revised draft Recommendation A.1. We clarified our intention of having the DASD(PSF&E) perform independent review of commissary construction requirements. Validation of commissary construction requirements should be performed by DeCA Facility Directorate personnel. The DASD(PSF&E) should review, oversee, and approve project requirements at

## Finding A. Commissary Construction Requirements

---

initial project development stages and as changes occur in requirements. We also revised draft Recommendation A.2.b. to delete the reference of using Surcharge Funds to pay for increased commissary operating hours.

1. We recommend that the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education review and coordinate the information used to justify and support commissary construction requirements prior to submission of the Defense Commissary Agency's program to Congress.

**Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education Comments.** The DASD(PSF&E) stated that individual project validations should be performed by DeCA and that the primary role of her office is to provide program review, oversight, and approval after individual projects have been validated.

**Audit Response.** We request that the DASD(PSF&E) provide additional comments that indicate concurrence or nonconcurrence with the revised recommendation. Specifically, we request that the DASD(PSF&E) state her position on the review and oversight process occurring during and after the project has been validated by DeCA.

**DeCA Comments.** Although not required to comment on Recommendation A.1., the Director, DeCA, partially concurred, stating that in FY 1994, the DASD(PSF&E) began efforts to develop oversight procedures applicable to the commissary construction process. Beginning with the FY 1995 program, the DASD(PSF&E) instituted new procedures to review, oversee, and coordinate the commissary construction program. The new procedures should enhance the construction review and oversight process.

### 2. We recommend that the Director, Defense Commissary Agency:

- a. Revise DeCA Directive 20-1 to include procedures and management controls necessary to ensure that accurate, complete, and up-to-date project documentation is prepared in support of initial commissary construction requirements, and as changes occur in project requirements, and that information to show that project scopes are the minimum necessary to satisfy commissary patron requirements is validated.
- b. Consider increased operating hours or days as an alternative to new commissary construction.
- c. Establish procedures similar to those developed by the Assistant Secretary of Defense (Health Affairs) for completion of the economic analysis. Those procedures should include identification and evaluation of alternatives to new construction, and completion of engineering evaluations and facility inspections to support the analyses.

## Finding A. Commissary Construction Requirements

---

**DeCA Comments.** DeCA concurred with Recommendation A.2.a., stating that in January 1995, it initiated a rewrite of DeCA Directive 20-1, "Planning and Programming Major and Minor Commissary Construction Projects." DeCA anticipates completion of the rewrite within 90 days of the issuance of revised DoD Instruction 7700.18 that discusses nonappropriated fund project review and reporting procedures. DeCA stated, "It is DeCA's intention to work closely with the DoDIG during the rewrite process to insure that the completed directive fully meets the intent of their recommendations and incorporates all policy guidance of DoDI [Instruction] 7700.18."

DeCA nonconcurred with draft Recommendation A.2.b. to expand the use of surcharge funds as a way to pay for increased operating hours. DeCA stated that surcharge funds should be used for operating equipment and supplies, construction, and renovation of commissaries. DeCA stated, "Use of surcharge funds for labor costs was never intended and if implemented would have the potential to decrease patron savings." However, in its comments on the finding, DeCA agreed to consider increased operating hours as an alternative to new commissary construction. That satisfies the intent of the draft recommendation and is our basis for revising the recommendation.

DeCA concurred with Recommendation A.2.c., stating that the steps outlined in the draft Health Affairs Economic Analysis Procedures Manual are very similar to DeCA procedures. Completion of the revised DeCA Directive 20-1 will establish procedures for a complete engineering evaluation and a formal economic analysis.

**Audit Response.** The DeCA comments to Recommendations A.2.a. and A.2.c. are responsive. The comments to the recommendations and the DeCA efforts to tighten controls over its commissary construction program are noteworthy. As a result of the comments, we revised Recommendation A.2.b. Although DeCA nonconcurred with the draft recommendation, actions taken satisfy the intent of the revised recommendation. We continue to believe that extending operating hours would significantly increase commissary store customer satisfaction and could often be a viable alternative to expanding store size.

---

## Finding B. Commissary Sizing Criteria

DeCA built six commissaries at Army and Air Force installations since October 1991 that were larger than necessary. The condition occurred because DeCA inappropriately included tobacco and troop issue sales in sales projections used to justify and support commissary sizes. As a result, DeCA spent Commissary Surcharge Collections Funds for commissary square footage that may have been in excess of patron requirements.

### Oversized Commissaries

Since October 1991, DeCA built 14 commissaries at Army and Air Force installations and sales information for 6 of the 14 commissaries indicated they were sized in excess of minimal square-footage requirements. Our analysis of actual commissary sales information from October 1991 to May 1994 showed that commissary sizes exceeded minimal requirements, in part, because DeCA inappropriately included tobacco and troop issue sales in average monthly sales projections used to size commissaries.

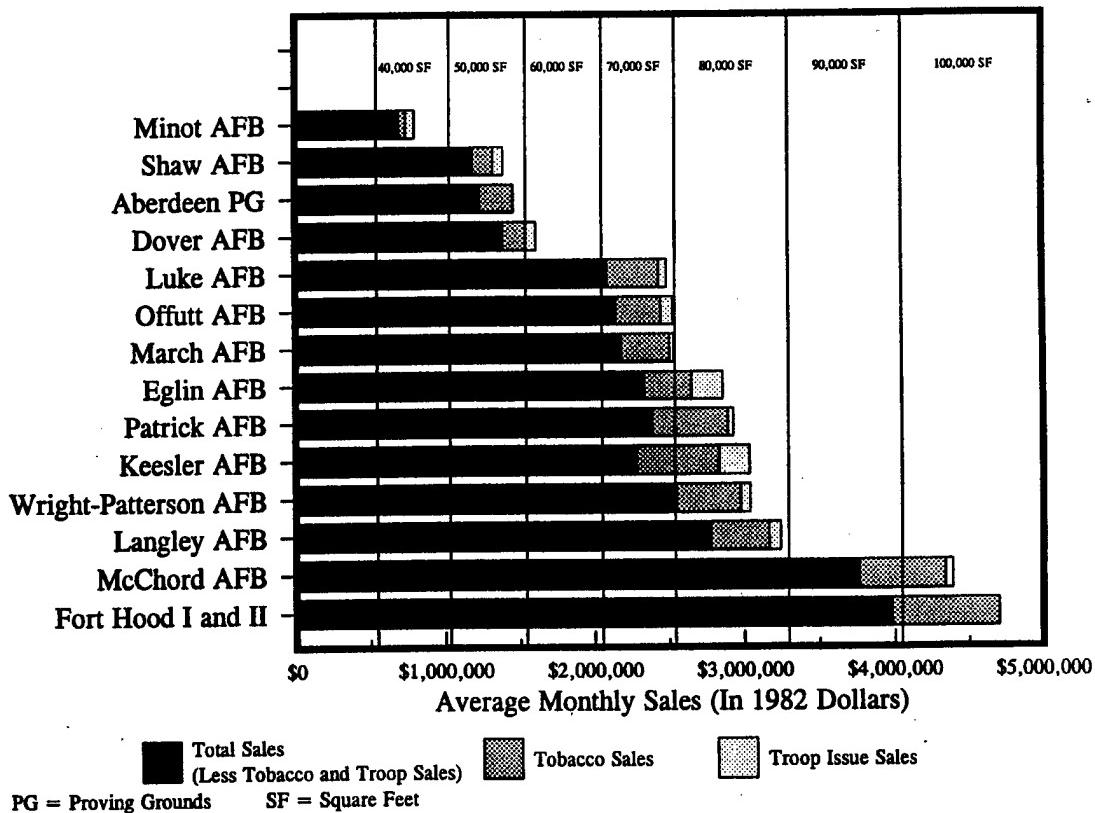
**Tobacco Sales.** Commissaries at Army and Air Force installations are authorized to sell cigarettes, cigars, chewing tobacco, pipe tobacco and smokeless tobacco. Tobacco products occupy minimal portions of the sales and warehouse areas. However, sales of those products can significantly distort commissary square footage requirements. For example, by including tobacco sales in average monthly sales at Eglin AFB, DeCA justified an 80,000-square foot commissary project. Average monthly sales without tobacco sales at Eglin AFB supported a 70,000-square foot commissary.

**Troop Issue Sales.** DeCA provides troop issue subsistence support for military dining facilities. Commissaries at all Air Force bases and at 11 Army installations have a troop support mission. Troop issue sales is the prearranged ordering, receipt, and issuance of grocery items and does not require the sales area or customer support that DeCA provides to other authorized commissary patrons. Installations, not DeCA, are required to provide the facilities, administrative support, and equipment necessary to support troop issue sales.

**Commissaries at Navy and Marine Corps Installations.** Commissaries located on Navy and Marine Corps installations are not authorized to sell tobacco products; and they do not have a troop support mission. As a result, commissary square footage requirements at Navy and Marine Corps installations are based solely on grocery, produce, and meat sales to commissary patrons. The same sizing criteria DeCA uses to determine Navy and Marine Corps installation commissary sizes is also applied to Army and Air Force installation commissaries. However, use of the same criteria overstates commissary space requirements at Army and Air Force installations because tobacco and troop issue sales are inappropriately included in sales projections.

## Finding B. Commissary Sizing Criteria

**Overstated Criteria.** Tobacco and troop issue sales can distort average monthly sales used to identify commissary square footage requirements. We analyzed commissary sales information for 14 continental United States commissaries that were constructed on Army and Air Force installations since October 1991. For the 32-month period ending in May 1994, average monthly tobacco sales, in 1982 dollars, ranged from \$48,000 at Minot AFB to \$722,000 at Fort Hood. Average monthly troop issue sales for the same period ranged from \$57,000 at Minot AFB to \$209,000 at Eglin AFB. The figure below shows the effects of including tobacco and troop issue sales in the criteria used to determine authorized commissary sizes.



### The Effect on Authorized Commissary Sizes by Including Tobacco and Troop Issue Sales in Actual Average Monthly Sales

By including tobacco and troop issue sales in total commissary sales for commissaries at Dover AFB, Eglin AFB, Fort Hood, Keesler AFB, McChord AFB, and Patrick AFB, overall sales were inflated and resulted in commissary square footage requirements that were overstated.

Appendix E shows the effect of removing tobacco and troop issue sales, as adjusted to 1982 dollars, from commissary sales at 14 Army and Air Force installations. Removal of tobacco and troop issue sales from average monthly sales results in authorized commissary sizes that are smaller than those that were actually built.

## **Conclusion**

Accurate commissary sales information, used to project future commissary sales, is critical to the DeCA commissary planning process. The intent of the DeCA average monthly sales projections and 10 commissary sizing criteria is to provide a properly sized commissary that will satisfy current and projected commissary patron requirements. The inclusion of tobacco or troop issue sales in overall sales projections to determine commissary sizes is inappropriate. DeCA should develop specific retail and storage space allowances for tobacco products and discontinue including those amounts in the sales figures used to determine authorized commissary sizes. Additionally, DeCA should discontinue including troop issue sales in average monthly sales figures since facilities, administrative support, and equipment necessary to support those sales are provided by installations.

## **Recommendations, Management Comments, and Audit Response**

**We recommend that the Director, Defense Commissary Agency:**

- 1. Determine specific retail and storage square footage allowances necessary to support tobacco product sales in commissaries located at Army and Air Force installations.**
- 2. Establish commissary requirements at Army and Air Force installations using sales projections that do not include tobacco and troop issue sales.**
- 3. Revalidate and resize, as appropriate, planned commissary construction projects using corrected sales information.**

**DeCA Comments.** DeCA concurred with Recommendation B.1., stating that square footage allowances necessary to support tobacco product sales at Army and Air Force commissaries have been determined and that the average figure is 1 percent of the total store area.

## **Finding B. Commissary Sizing Criteria**

---

DeCA concurred with Recommendation B.2., stating that its sales forecasting procedures used to size commissary projects have been revised to exclude tobacco and troop issue sales.

DeCA concurred with Recommendation B.3., stating that it has completed a review of planned projects to ensure that feasible alternatives were considered. Additionally, DeCA stated that the economic analyses for the FY 1995 commissary construction program were updated to reflect current conditions. Further, DeCA reviewed planned projects using corrected sales information (excluding tobacco and troop issue sales), and identified five projects for which it plans to reduce the size of the sales area. The projects are located at Fort Benning, Georgia; Fort Carson, Colorado; Fort Leavenworth, Kansas; Little Rock AFB, Arkansas; and Mountain Home AFB, Idaho.

**Audit Response.** DeCA comments to Recommendations B.1. and B.2. are responsive. A draft of this report identified potential monetary benefits associated with Recommendation B.3. as undeterminable because the benefits would be based on future management decisions. In subsequent correspondence, DeCA estimated that costs for reducing the sales area for four of the five projects will be reduced by about \$2.3 million. We have identified the \$2.3 million as funds put to better use in Appendix F. We request that DeCA provide comments on the potential benefits for the four projects and provide the estimated cost reduction for the Little Rock AFB project in response to the final report.

## **Management Comments on Appendix E and Audit Response**

**DeCA Comments.** DeCA did not agree with the data presented in Appendix E and requested that the Inspector General, DoD, review the data and conclusions before issuance of the final report.

**Audit Response.** As a result of the DeCA comments to the draft report, we revised Appendix E. Commissary renovations may include upgrade work to existing commissary administrative, sales, and warehouse areas that may be in addition to new construction of additional space. We were unable to determine and allocate costs applicable to renovation work of existing space. We were also unable to determine and allocate costs attributable to adding new space to existing commissaries. As a result, we deleted the portion of Appendix E that applied per square foot renovation costs to 10,000-square foot increments of unneeded space. Those increments resulted from the inappropriate inclusion of tobacco and troop issue sales in sizing decisions.

## **Part III - Additional Information**

---

## **Appendix A. Prior Audits and Other Reviews**

The Inspector General, DoD, has issued five reports questioning the validity of data used to justify replacement commissary projects.

Inspector General, DoD, Report No. 95-002, "Replacement Commissary Construction Project at Hanscom Air Force Base, Massachusetts," October 4, 1994, showed that the planned \$11 million, 70,000-square foot commissary at Hanscom AFB was not required to satisfy customer requirements. We recommended that DeCA place the Hanscom AFB replacement commissary construction project on hold and that DeCA determine commissary construction requirements using future personnel authorizations and up-to-date sales projections. We also recommended that DeCA consider renovation as an alternative to new construction. DeCA concurred with the recommendation to place the Hanscom AFB replacement commissary project on hold and to determine commissary requirements using future personnel authorizations and up-to-date sales projections. DeCA also agreed to evaluate renovation of the Hanscom AFB commissary as an alternative to construction, after decisions by the 1995 Commission on Defense Base Closure and Realignment are known.

Inspector General, DoD, Report No. 94-197, "Replacement Commissary Construction Project for the Naval Air Station Pensacola, Florida," September 29, 1994, showed that DeCA planned to construct an 80,000-square foot commissary that exceeded customer requirements. The report recommended that DeCA place the \$11.8 million replacement commissary project on hold; base the size of the commissary renovation project on accurate and up-to-date sales projections and future personnel authorizations; and evaluate renovation of the existing Naval Air Station Pensacola commissary as an alternative to new construction. DeCA concurred with the recommendation to place the Naval Air Station Pensacola replacement commissary project on hold until requirements have been fully determined and validated. DeCA nonconcurred with the recommendation to base the size of the commissary renovation project on accurate and up-to-date sales projections and future personnel authorizations. Although DeCA nonconcurred with the recommendation, its planned actions to validate sales projections and personnel authorizations and complete the economic analysis met the intent of the recommendation. DeCA concurred with the recommendation to complete an economic analysis after validating requirements and determining the proper size of the replacement commissary project. We requested that DeCA provide the results of its analysis and comments on the potential monetary benefits by December 15, 1994. DeCA provided an engineering evaluation, economic analysis, and other comments to the report on April 24, 1995. We are in the process of analyzing the April 24, 1995 comments.

Inspector General, DoD, Report No. 94-172, "Quick-Reaction Report on the Replacement Commissary Construction Project at Fort Bragg, North Carolina," August 1, 1994, showed that DeCA planned to construct a \$14.4 million, 100,000-square foot replacement commissary at Fort Bragg that was not required to satisfy customer requirements. The proposed 100,000-square foot

## Appendix A. Prior Audits and Other Reviews

---

commissary would replace the 22,000-square foot Mallonee Village commissary and supplement the existing 91,000-square foot Fort Bragg main commissary. The report recommended that DeCA place the replacement commissary construction project on hold until requirements have been fully determined and validated. The report also recommended that DeCA evaluate consolidation of the Mallonee Village facility with the Fort Bragg main commissary, to include renovation as an alternative to new construction, and that the evaluation include completion of an economic analysis and an up-to-date market research and analysis and patron survey. We also recommended that DeCA base the size of any commissary project on reasonable and up-to-date sales projections. The Director, DeCA, agreed to defer the new commissary project pending a review of sales and demographic projections. The Director also stated that an economic analysis, to include expansion of the existing main commissary and an on-site engineer evaluation of the main commissary, would be conducted. After completing a review of commissary sales and demographic projections, DeCA completed an economic analysis and engineering evaluation and provided comments to the final report on May 17, 1995. We are in the process of analyzing the May 17, 1995, comments.

Inspector General, DoD, Report No. 94-100, "Quick-Reaction Report on the Commissary Construction Project at the Fitzsimons Army Medical Center, Denver, Colorado," May 16, 1994, showed that DeCA planned to construct an 80,000-square foot replacement commissary at the medical center that exceeded customer requirements. The report recommended that DeCA defer the \$11.3 million replacement commissary construction project until decisions on the replacement hospital construction project are finalized. We also recommended that, if a decision is made to proceed with the hospital project, the replacement commissary not exceed 70,000 square feet and that an economic analysis be completed. DeCA agreed to downsize the replacement commissary project to 70,000 square feet. DeCA did not concur with deferring the project. DeCA stated that extensive coordination had been conducted with the Department of the Army, DoD, congressional offices, and the Fitzsimons Army Medical Center to ensure that the hospital was a viable installation for long-term retention.

However, in December 1994, the Deputy Secretary of Defense deleted funding for the replacement hospital project from the DoD budget and directed that contracts associated with construction of facilities at the Fitzsimons Army Medical Center be curtailed. In March 1995, the DoD recommended to the Defense Base Closure and Realignment Commission that the Fitzsimons Army Medical Center be closed.

Inspector General, DoD, Report No. 94-031, "Quick-Reaction Report on the Commissary Construction Project at the Naval Station, Guam," January 18, 1994, showed that DeCA planned to build a \$17 million, 60,000-square foot replacement commissary that exceeded customer requirements. The report recommended that the replacement commissary project be placed on hold until the Navy provided accurate, complete, and up-to-date planned force realignment and personnel reduction information; until DeCA revalidated the need for the project; and until an economic analysis was completed. The Director, DeCA, believed that the poor condition of the

## **Appendix A. Prior Audits and Other Reviews**

---

existing facility necessitated proceeding with a replacement project, but agreed to downsize the commissary to 50,000 square feet. Additionally, the Director, DeCA, now requires that a formal economic analysis be completed for every new construction project. Further, a construction review committee with a member from each Military Department was established to validate each construction project. In March 1995, the DoD forwarded to the Defense Base Closure and Realignment Commission, a Navy recommendation that the Navy presence on Guam be significantly reduced.

## Appendix B. FY 1995 Through FY 1997 DeCA Major Construction Program

### FY 1995

<u>Installation</u>	<u>Programmed Cost</u> <u>(millions)</u>	<u>New/Upgrade</u>	<u>Size</u> <u>(square feet)</u>
Fort Benning, GA	8.6	Upgrade	90,000
Fort Bragg, NC	*	New	100,000
Fort Huachuca, AZ	5.0	Upgrade	60,000
Fort Riley, KS	10.2	New	70,000
MCAS Cherry Point, NC	5.0	Upgrade	60,000
McClellan AFB, CA	9.8	Upgrade	110,000
McConnell AFB, KS	8.4	New	60,000
Moffett Field, CA	8.0	New	60,000
Mountain Home AFB, ID	9.2	New	60,000
NAS Pensacola, FL	*	New	80,000
NAF El Centro, CA	2.6	New	12,000
NCBC Port Hueneme, CA	9.2	New	60,000
NETC Newport, RI	3.9	Upgrade	40,000
NS Keflavik, Iceland	12.8	Upgrade	30,000
Schofield Barracks, HI	16.4	New	80,000
Taegu, South Korea	8.5	New	30,000
Vogelweh, Germany	12.7	New	60,000
Total	\$130.3		

### FY 1996

<u>Installation</u>	<u>Programmed Cost</u> <u>(millions)</u>	<u>New/Upgrade</u>	<u>Size</u> <u>(square feet)</u>
Charleston AFB, SC	\$5.5	Upgrade	70,000
Fort Carson, CO	6.8	Upgrade	80,000
Fort Greely, AK	7.2	New	20,000
Fort Leavenworth, KS	6.1	Upgrade	70,000
Holloman AFB, NM	2.9	Upgrade	50,000
Little Rock AFB, AR	6.9	Upgrade	80,000
MacDill AFB, FL	7.5	Upgrade	100,000
NAS Lemoore, CA	7.2	New	50,000
NAS Meridian, MI	4.4	New	30,000
NAS Oceana, VA	10.9	Upgrade	80,000
Reese AFB, TX	3.1	Upgrade	40,000
Scott AFB, IL	8.0	Upgrade	90,000
Sierra AD, CA	3.0	New	20,000
Tinker AFB, OK	7.6	Upgrade	90,000
Total	\$87.1		

## **Appendix B. FY 1995 Through FY 1997 DeCA Major Construction Program**

---

### **FY 1997**

<b><u>Programmed</u></b>			
<b><u>Installation</u></b>	<b><u>Cost</u></b> <b><u>(millions)</u></b>	<b><u>New/Upgrade</u></b>	<b><u>Size</u></b> <b><u>(square feet)</u></b>
ARDEC, Picatinny Arsenal, NJ	\$ 4.6	New	30,000
C.E. Kelly SF, PA	6.1	New	40,000
Dyess AFB, TX	4.1	Upgrade	50,000
Fort Hamilton, NY	7.3	New	50,000
Fort Richardson/Elmendorf AFB, AK	20.9	New	100,000
Illesheim, Germany	4.0	Upgrade	30,000
NAS North Island, CA	7.5	New	50,000
NSB Kings Bay, GA	4.0	Upgrade	40,000
NAU Scotia, NY	4.7	New	30,000
Peterson AFB, CO	4.7	Upgrade	60,000
Pusan, South Korea	3.1	New	20,000
Rhein-Neckar, Germany	<u>15.0</u>	New	80,000
<b>Total</b>	<b>\$86.0</b>		

\* The Fort Bragg and NAS Pensacola projects were originally approved and funded in the DeCA FY 1994 program. As a result of audits of the two projects, DeCA moved the projects to the FY 1995 program year. Both projects are currently on hold.

### **Acronyms**

AD - Army Depot  
AFB - Air Force Base  
AMC - Army Medical Center  
ARDEC - Armament Research, Development and Engineering Center  
MCAS - Marine Corps Air Station  
NAF - Naval Air Facility  
NAU - Naval Administrative Unit  
NAS - Naval Air Station  
NCBC - Naval Construction Battalion Center  
NETC - Naval Education and Training Center  
NS - Naval Station  
NSB - Naval Submarine Base  
SF - Support Facility

---

## **Appendix C. Appropriated Fund Military Construction Approval Process**

The goal of the military construction process is to provide facilities necessary to accomplish an assigned mission at the lowest life-cycle cost. The process is designed to:

- o make maximum use of existing facilities;
- o ensure that requirements for new or expanded facilities are justified; and
- o ensure that requirements are accurate, documented, validated, and revalidated as requirements change in project scopes.

**Planning Stage.** In the planning stages of a new facility, a facility requirement identifies the minimum facilities necessary to satisfy an assigned mission. Facility requirements are developed using space planning criteria that have been developed over time based on historical usage and experience. Space allocations are based on an analysis of an installation's assigned tasks; mission; the number of people, ships, aircraft, vehicles, etc., to be accommodated; and work load. The basic facility requirement states exactly what is needed, and the requirement must be accurate and well justified. Events that occur during the planning stage of a new facility are:

- o issuance of programming and military construction guidance to major commands and installations,
- o preparation and submission to major commands of installation-prioritized construction lists,
- o submission by major commands of prioritized construction project lists to the respective engineering offices of the Military Departments, and
- o development by Military Department engineering personnel of a department-wide priority list and submission of the list to the Military Department construction review committees.

**Programming Stage.** After a construction review committee approves a project, the project enters the programming stage. The programming stage is the period when initial information such as assumptions, calculations, descriptions, and other pertinent backup information is prepared to support a project requirement. The information should also support the initial design of the project. The following is a description of information gathered during the programming stage.

## **Appendix C. Appropriated Fund Military Construction Approval Process**

---

o DoD Form 1391 (DD Form 1391), "Military Construction Project Data," the primary document used to summarize supporting project information, is prepared. The form contains a description of the proposed project and identifies initial funding requirements.

o Up-to-date inspection reports of the existing facility, to include estimated costs of required maintenance and repairs, are prepared.

o Detailed cost estimates that include costs to construct the building, built-in equipment, and adjustments for geographical differences are prepared. The cost estimates are to include support costs, such as communications, electrical and mechanical utilities; parking, roads, and sidewalks; site improvements (fencing, landscaping, and seeding); and demolition of any existing structures.

o An economic analysis of all viable alternatives to the proposed project is prepared. The economic analysis includes consideration and evaluation of the status quo, vacant existing facilities, commercial leases, and renovations to existing facilities. Historical life-cycle operating costs for a facility are included so that a comparison can be made to the estimated annual costs to operate the proposed facility versus the existing facility.

o Estimated project design-related information, including estimated design costs, is developed.

o Equipment associated with the project that will be provided from other funding appropriations is identified.

o A summary of the environmental impact of the project is prepared, which includes an environmental assessment and a geological survey of the proposed construction site.

o If appropriate, similar existing facilities should be identified at adjacent civilian communities and nearby military installations. The interdependence of those relationships may directly affect the scope of the proposed project.

**Design Stage.** At the design stage, installation facility planning personnel validate documentation supporting project scopes and refine and augment project requirements, as necessary. During this stage, installations are required to provide sufficient project detail to certify the projects as ready for design. Incomplete or inaccurate project scopes will delay the design process, waste limited design resources, and jeopardize the project during budget reviews. At the design stage, the following events occur.

o The proposed project is "certified" as ready for design.

o The initial project conceptual design is completed and represents about 35 percent of the total design effort. At this point the scope of the project is established and finalized.

## **Appendix C. Appropriated Fund Military Construction Approval Process**

---

o The next design phase is the preliminary design of the project, which represents about 65 percent of the design effort.

o The final design for a project will be completed before the start of the fiscal year in which the construction contract is to be awarded.

**Budgeting Stage.** The budgeting stage is the point at which the Military Departments, the Office of the Secretary of Defense, and the Office of Management and Budget review the project and the required funding. Upon completion of the reviews, Congress examines the budget submissions and conducts hearings on the proposed projects. After Congress reviews and authorizes the project, it signs an appropriation bill for DoD to release funds for the projects.

**Construction Stage.** After Congress approves and DoD releases funds for a project, the construction contract is awarded and construction begins.

---

## **Appendix D. Defense Commissary Agency Construction Approval Process**

The DeCA construction program is designed to occur over a 3-year period. Its planning, programming, and execution process involves cost estimating, budgeting, project prioritization, project siting, and sizing.

**Planning Stage.** During the commissary project planning stage, the commissary construction budget is developed based on an estimate of the surcharge collections funds available for the construction of commissaries. Surcharge collections are funds that can be used to build, expand, or improve commissaries. Traditionally, the construction program has used about 40 percent of the surcharge collections funds. Each fiscal year, DeCA prepares a budget projection of the amount of funding available to the construction program. When a construction budget is established, prioritized projects are inserted into the construction program until the limit of available funds is reached. Projects not making the end of fiscal year cutoff are reprogrammed to be included in the following fiscal year.

**Project Identification and Programming.** DeCA regions prioritize proposed construction projects 3 years before planned construction. The regions submit construction priorities to the Facilities Directorate at DeCA Headquarters, which develops a preliminary commissary construction program. The proposed construction program includes the location, the total estimated cost, and the scope of the project. Personnel at DeCA Headquarters and the Director, DeCA, provide input toward developing the initial budgeting, prioritization, and sizing of the proposed projects. After DeCA personnel have reviewed and commented on the preliminary program, it is presented to the Director, DeCA, for approval.

**Project Development.** During the project development stage, DeCA personnel visit the installations included in the commissary construction program. The purpose of the visits is to identify site requirements, to coordinate with installation master planners and engineers, and to make agreements regarding the installations' and DeCA responsibilities on the planned project. DeCA prepares project development brochures containing information used to justify a commissary site and size. After DeCA gathers the information, it is forwarded to the Design and Construction Division of the Facilities Directorate, where the design process begins.

**Internal and External Coordination.** After completion of the project development stage and 2 years before the start of planned construction, DeCA conducts meetings with representatives from the Construction Requirements Review Committee, who review, validate, and prioritize projects for the DCB. The DCB advises DeCA of any difficulty caused by base closure or other actions that may have been unforeseen. Upon the Construction Requirements Review Committee's final approval, the program is presented to the DCB as the recommended program. Upon the DCB's final approval, DeCA authorizes the project design by forwarding a project memorandum to the Design and

## **Appendix D. Defense Commissary Agency Construction Approval Process**

---

Construction Division at Lackland AFB, Texas. During the approval process, DeCA develops detailed DD Forms 1391 and supporting justifications for the project and initial budgets. DeCA sends the completed DD Forms 1391 to the installation for review and signature.

**DoD and Congressional Project Approval.** One year before the scheduled construction, DeCA consolidates the front pages of the DD Forms 1391 into the DeCA Construction Report. The report is forwarded to the Under Secretary of Defense (Comptroller) as part of the annual surcharge budget process. The report is also forwarded to the DASD(PSF&E) for review and concurrence. The final DeCA construction program is sent to the House Committee on National Security and the Senate Armed Services Committee for their review, approval, and release of funds.

**Execution.** After the House Committee on National Security and the Senate Armed Services Committee release Commissary Surcharge Collections Funds, DeCA awards the contracts for construction.

---

## Appendix E. Actual and Corrected Monthly Commissary Sales and Their Effect on Commissary Space

<u>Location</u>	<u>DeCA Average Monthly Sales<sup>1</sup></u>	<u>DeCA Authorized (sq. ft.)</u>	<u>Less: Troop Issue Sales</u>	<u>Less: Tobacco Sales</u>	<u>Adjusted Average Monthly Sale</u>	<u>DoDIG Corrected (sq. ft.)</u>
Aberdeen, MD	\$1,462,425	50,000	0	\$ (227,298)	\$1,235,127	50,000
Dover AFB, DE	1,612,725	60,000	\$ (66,725)	(157,416)	1,388,584	50,000
Eglin AFB, FL	2,860,425	80,000	(209,175)	(318,565)	2,332,685	70,000
Ft. Hood I and II, TX <sup>2</sup>	4,702,175	190,000	0	(721,993)	3,980,182	100,000
Keesler AFB, MS	3,035,925	80,000	(199,275)	(555,752)	2,280,898	70,000
Langley AFB, VA	3,242,350	80,000	(75,875)	(388,408)	2,778,067	80,000
Luke AFB, AZ	2,484,525	70,000	(53,925)	(344,158)	2,086,442	70,000
March AFB, CA	2,533,375	70,000	(29,250)	(323,090)	2,181,035	70,000
McChord AFB, WA	4,391,775	100,000	(48,925)	(577,897)	3,764,953	90,000
Minot AFB, ND	801,225	40,000	(56,700)	(48,027)	696,498	40,000
Offutt AFB, NE	2,526,025	70,000	(80,250)	(301,878)	2,143,897	70,000
Patrick AFB, FL	2,929,700	80,000	(35,850)	(504,318)	2,389,532	70,000
Shaw AFB, SC	1,391,700	50,000	(66,825)	(136,075)	1,188,800	50,000
Wright Patterson AFB, OH	3,041,750	80,000	(64,625)	(427,098)	2,550,027	80,000

<sup>1</sup>Average monthly sales were computed using sales from FY 1992, FY 1993, and the first 8 months of FY 1994, adjusted to 1982 dollars.

<sup>2</sup>Average monthly sales of \$4.7 million justify only a 100,000-square foot commissary (Ft. Hood I). Nonetheless, DeCA constructed an additional 90,000-square foot commissary (Ft. Hood II).

---

## **Appendix F. Summary of Potential Benefits Resulting From Audit**

<b>Recommendation Reference</b>	<b>Description of Benefit</b>	<b>Amount and Type of Benefit</b>
A.1.	Management Control. Provides oversight to ensure the accuracy and validity of commissary construction requirements.	Undeterminable.
A.2.a., A.2.b., A.2.c.	Management Control. Results in properly developed and documented project requirements and cost estimates. Considers expanded operating hours as an alternative to construction. Requires that all alternatives to new construction are considered and that project scopes are the minimum necessary to satisfy requirements.	Undeterminable.
B.1., B.2.	Management Control. Revises commissary construction requirements at Army and Air Force installations to reflect justified requirements and project costs.	Undeterminable.
B.3.	Economy and Efficiency. Determines valid space requirements	Funds put to better use. \$2.3 million in FY 1995 Surcharge Collections Funds (97X8164.6400) for commissary projects at Fort Benning, Fort Carson, Fort Leavenworth, and Mountain Home AFB. DeCA is to provide the estimated cost reduction for the project at Little Rock AFB. Amounts for future projects are undeterminable.

---

## **Appendix G. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Personnel and Readiness, Washington, DC  
Defense Manpower Data Center, Arlington, VA, and Monterey, CA

### **Department of the Army**

Forces Command, Fort McPherson, GA  
Fort Bragg, Fayetteville, NC  
Fitzsimons Army Medical Center, Denver, CO

### **Department of the Navy**

Commander in Chief, U.S. Pacific Fleet, Pearl Harbor, HI  
Deputy Chief of Naval Operations (Logistics), Washington, DC  
Deputy Chief of Naval Operations (Manpower and Personnel), Washington, DC  
Deputy Chief of Naval Operations (Plans, Policy and Operations), Washington, DC  
Bureau of Naval Personnel, Washington, DC  
Chief, Naval Education and Training, Naval Air Station, Pensacola, FL  
Headquarters, Naval Facilities Engineering Command, Alexandria, VA  
Naval Technical Training Center, Corry Station, Pensacola, FL  
Naval Air Station Pensacola, FL  
Headquarters, Marine Corps, Washington, DC

### **Department of the Air Force**

Deputy Chief of Staff, Plans and Operations, Washington, DC  
Program Management Office, Air Force Base Disposal Agency, Washington, DC  
Lowry Economic Recovery Project Office, Lowry Air Force Base, Denver, CO  
Hanscom Air Force Base, Bedford, MA  
Lowry Air Force Base, Denver, CO  
Buckley Air National Guard Base, Aurora, CO

## **Appendix G. Organizations Visited or Contacted**

---

### **Defense Organizations**

Defense Commissary Agency, Headquarters, Fort Lee, Petersburg, VA  
Design and Construction Division, Lackland Air Force Base, TX  
East Service Center, Fort Lee, VA  
West Service Center, Lackland Air Force Base, TX  
Central Region, Little Creek Naval Amphibious Base, Little Creek, VA  
Fort Bragg, Commissary Resale Store, Fayetteville, NC  
Mallonee Village Commissary Resale Store, Fort Bragg, Fayetteville, NC  
Pope Air Force Base, Commissary, Commissary Resale Store, Fayetteville, NC  
Midwest Region, Colorado Springs District, Peterson Air Force Base, CO  
Fitzsimons Army Medical Center, Commissary Resale Store, Denver, CO  
Lowry Air Force Base, Commissary Resale Store, Denver, CO  
Northeast Region, Fort Meade, MD  
Fort Devens, Commissary Resale Store, Ayer, MA  
Hanscom Air Force Base, Commissary Resale Store, Bedford, MA  
Northwest Pacific Region, Fort Lewis, WA  
Southern Region, Maxwell Air Force Base, Montgomery, AL  
Eglin Air Force Base, Commissary Resale Store, Valpariso, FL  
Hurlburt Field, Commissary Resale Store, Fort Walton Beach, FL  
Naval Air Station Pensacola, Commissary Resale Store, Corry Station, Pensacola, FL  
Naval Air Station Whiting Field, Commissary Resale Store, Milton, FL  
Southwest Region, El Toro Marine Corps Air Station, Santa Ana, CA  
McClellan Air Force Base, Commissary Resale Store, Sacramento, CA  
Moffett Field, Commissary Resale Store, Sunnyvale, CA  
Army and Air Force Exchange Service, Headquarters, Dallas, TX  
Washington Headquarters Services, Washington, DC

### **Non-Defense Federal Organizations**

National Aeronautics and Space Administration, Ames Research Center, Moffett Field, Sunnyvale, CA

### **Non-Government Organizations**

The Kroger Company, Cincinnati, OH  
Miller Dyer Spears, Inc., Boston, MA

---

## **Appendix H. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology  
    Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense (Comptroller)  
    Deputy Chief Financial Officer  
    Deputy Comptroller (Program/Budget)  
Under Secretary of Defense for Personnel and Readiness  
Assistant Secretary of Defense (Economic Security)  
Assistant to the Secretary of Defense (Public Affairs)

### **Department of the Army**

Auditor General, Department of the Army

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management and Comptroller)  
Commander, Naval Facilities Engineering Command  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Defense Organizations**

Director, Defense Commissary Agency  
Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Director, National Security Agency  
    Inspector General, National Security Agency

## **Non-Defense Federal Organizations and Individuals**

**Office of Management and Budget**

**National Security and International Affairs Division, General Accounting Office**

**Technical Information Center**

**Defense and National Aeronautics and Space Administration Management Issues**

**Military Operations and Capabilities Issues**

**Chairman and ranking minority member of each of the following congressional committees and subcommittees:**

**Senate Committee on Appropriations**

**Senate Subcommittee on Defense, Committee on Appropriations**

**Senate Subcommittee on Military Construction, Committee on Appropriations**

**Senate Committee on Armed Services**

**Senate Committee on Governmental Affairs**

**House Committee on Appropriations**

**House Subcommittee on Military Construction, Committee on Appropriations**

**House Subcommittee on National Security, Committee on Appropriations**

**House Committee on Government Reform and Oversight**

**House Subcommittee on National Security, International Affairs, and Criminal**

**Justice, Committee on Government Reform and Oversight**

**House Committee on National Security**

This page was left out of original document

## **Part IV - Management Comments**

# Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education Comments



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE  
4000 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-4000



JUN 6 1995

## MEMORANDUM FOR INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE, LOGISTICS SUPPORT DIRECTORATE

SUBJECT: Audit Report on Replacement Commissary Construction Requirements (Project No. 3LA-0069)

In response to your March 21, 1995 memorandum, the subject draft report has been reviewed. Comments are provided regarding Finding A, Recommendation 1, that pertain directly to my office.

Finding A, Recommendation 1 provides the following: "We recommend that the Deputy Assistant Secretary of Defense for Personnel Support, Families and Education (PSF&E) review and validate the information used to justify and support commissary construction requirements prior to approval by the Defense Commissary Board and as changes occur in project requirements."

Consistent with the Department's construction policy for exchanges and the Service MWR activities, individual project validations should be performed by the Defense Commissary Agency (DeCA). The primary PSF&E role is to provide program review, oversight, and approval after individual projects have been validated by DeCA, the exchanges, and the individual Services.

I recommend that the validation function in Finding A, Recommendation 1 for PSF&E be deleted, and assigned to DeCA. I also request that the PSF&E oversight and approval responsibility be highlighted in the final report.

We appreciate the opportunity to provide comments on this report. My point of contact for this action is Mr. Jim Powell. He may be reached on (703) 697-7197/DSN 227-7197.

Carolyn H. Beccraft  
Deputy Assistant Secretary of Defense  
(Personnel Support, Families and Education)

cc:  
Director, Defense Commissary Agency



# Defense Commissary Agency Comments



DEFENSE COMMISSARY AGENCY  
HEADQUARTERS  
PORT LEE, VIRGINIA 23801-6300

REPLY TO  
ATTENTION OF

MAY 12 1995

IR

MEMORANDUM FOR INSPECTOR GENERAL, LOGISTICS SUPPORT DIRECTORATE,  
400 ARMY NAVY DRIVE, ARLINGTON, VA 22202-2884

SUBJECT: Audit Report on Replacement Commissary Construction  
Requirements (Project No. 3LA-0069)

Reference: DoDIG Memorandum, dtd March 21, 1995, SAB.

Attached is the DeCA reply to the recommendations provided in subject report. The audit identified some needed improvements to our construction procedures. DeCA has already implemented most of the recommendations and we are revising our directive accordingly.

The draft report concluded that DeCA's sizing criteria and methodology needs to be revised to ensure properly sized facilities. I agree. We have undertaken a comprehensive review of this issue with the objective of developing a new sizing model based on detailed merchandizing information. I think it's important to note that when looking at store sizing, commissaries are very efficient compared to commercial grocery stores when it comes to space utilization. For example, average monthly sales per square foot for DeCA facilities is \$74, compared to about \$30 for commercial stores. None the less, your recommendations are being incorporated into our procedures.

*Richard E. Beale*  
RICHARD E. BEALE, JR.  
Major General, USA  
Director

Attachment:  
As Stated

CC: DASD (PSF&E)  
(PPSPS)

## Defense Commissary Agency Comments

### Final Report Reference

Revised

#### DeCA COMMENTS AUDIT REPORT ON REPLACEMENT COMMISSARY CONSTRUCTION REQUIREMENTS

**DoDIG Finding A, Recommendation 1.** We recommend that the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education review and validate the information used to justify and support commissary construction requirements prior to approval by the Defense Commissary Board and as changes occur in project requirements.

Revised

**DeCA Response:** We are suggesting to the Deputy Assistant Secretary of Defense (PSF&E) to partially concur with this recommendation. We have discussed the issue of validation with PSF&E personnel. Both DeCA and PSF&E are in agreement that the validation function should be performed at DeCA. This is consistent with current practice for the Service MWR activities, and the exchange services. The PSF&E role should be one of review, broad oversight and coordination. PSF&E is already performing those functions and, starting with the FY 95 program, they instituted new procedures to enhance the process and to ensure uniformity among the Service MWR activities, the exchange services, and DeCA.

In late October 1993 DASD (PSF&E) began efforts towards improving their oversight of NAF and Commissary construction programs. This was to be accomplished through development of fully coordinated policies, procedures, and submission requirements for the various programs. DeCA involvement in this process started with an invitation to attend a working group meeting at OSD in January 1994. The first consolidated submission occurred with the FY 95 Services MWR, AAFES and DeCA programs. The effort to improve continues. In April of this year PSF&E hosted a working group meeting attended by representatives from the Service MWR activities, the exchanges and DeCA. The focus of the meeting was a draft revision of DoD Instruction 7700.18, Nonappropriated and Privately - Funded Construction Project Review and Reporting Procedures. This instruction is the basis for DeCA's major construction policy.

With respect to approval of DeCA construction requirements by the Defense Commissary Board (DCB), the DCB, as currently chartered, has no approval authority. It is an advisory board only. This was an OSD policy decision made when DeCA was created. The rationale was that since all fiduciary responsibility for commissaries was vested in OSD and DeCA that the Services should not be given authority to direct DeCA activities which would ultimately entail financial commitments and obligations.

## Defense Commissary Agency Comments

Based on the above considerations request that the wording of this recommendation be revised as follows:

"We recommend that the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education review and coordinate the information used to justify and support commissary construction requirements prior to submitting DeCA's program to Congress."

DoDIG Finding A, Recommendation 2a. Revise DeCA Directive 20-1 to include procedures and internal controls necessary to ensure that accurate, complete, and up-to-date project documentation is prepared in support of initial commissary construction requirements, and as changes occur in project requirements, and that information to show that project scopes are the minimum necessary to satisfy commissary patron requirements is validated.

DeCA Response: DeCA concurs with this recommendation. In January of 1995, DeCA initiated a rewrite of DecAD 20-1. The completion of the rewrite is linked to the completion of the revised DoD Instruction 7700.18, Nonappropriated and Privately - Funded Construction Project Review and Reporting Procedures, scheduled for October 1995. Guidance and requirements contained in this DoDI could have a significant impact on the final content of DecAD 20-1. It is DeCA's intention to work closely with the DoDIG during the rewrite process to insure that the completed directive fully meets the intent of their recommendations and incorporates all policy guidance of DoDI 7700.18. DeCA anticipates that revisions to DecAD 20-1 will be done within 90 days of the issuance of the revised DoDI 7700.18.

DeCA has improved its documentation of construction alternatives considered. Detailed information regarding existing assets, physical condition, siting, age, alternatives, costs etc. are now documented in an Engineering Evaluation (EE) report for each and every project. Through the following, the EE documents examination and development of options to correct validated facility deficiencies.

On Site Inspections	Square Foot Analysis	Cost Estimates
Economic Analysis	Parking Analysis	Utility Availability
Condition Analysis	Patron Loading Analysis	Demographic Surveys
Market Analysis	Maintenance Reports	Photos

DeCA has elected to use the U.S. Army Corps of Engineers, Huntsville Division, Automated Economic Analysis Package (ECONPACK) software to conduct EAs of its commissary projects. This automated process meets or exceeds the requirements of the DoDI 7041.3.

## Defense Commissary Agency Comments

Final Report  
Reference

Revised

Deleted  
Page 13

DeCA must have the flexibility to make sound business decisions regarding construction investment. Therefore, DeCA requests that alternate wording be considered for this recommendation as follows:

Revise DeCA Directive 20-1 to include procedures and internal controls necessary to ensure that accurate, complete, and up-to-date project documentation is prepared in support of initial commissary construction requirements, and as changes occur in project requirements. Ensure that adequate documentation is provided to show that project scopes meet patron needs and are based on sound business decisions representing best value.

**DoDIG Finding A, Recommendation 2b.** Propose a legislative change to United States Code, title 10, section 2685, to expand the use of commissary surcharge funds for increased commissary operating hours without a corresponding decrease in appropriated fund support.

**DeCA Response:** DeCA does not concur with this recommendation. DeCA strongly disagrees with any other use of surcharge funds not currently authorized by Title 10 United States Code 2685. These funds should only be used for operating equipment and supplies, construction, and renovation of stores. Use of surcharge funds for labor costs was never intended and if implemented would have the potential to decrease patron savings. It is noted that the DoDIG recommendation states the condition of; "..... without a corresponding decrease in appropriated fund support." However, even if the enabling legislation contains that provision, the precedent of paying for labor from surcharge collections would have been set. It would then be a relatively short step to rescind the "no cut in appropriated funds clause" which would lead directly to an erosion of service members pay since the commissary is a valuable portion of the total compensation package.

The other key issue that must be addressed when considering this recommendation is that of workyears. To expand current store hours would increase workyears for the agency. DoD has imposed a workyear limitation on all of its activities to meet its portion of the overall goal of reducing the federal workforce by 250,000 employees. DoD has directed DeCA to reduce its workyears by over 4,000 by the year 2001. Even if funding were readily available the workyear constraint would still have to be reckoned with.

**DoDIG Finding A, Recommendation 2c.** Establish procedures similar to those developed by the Assistant Secretary of Defense (Health Affairs) for completion of the economic analysis. Those procedures

## Defense Commissary Agency Comments

*should include identification and evaluation of alternatives to new construction, and completion of engineering evaluation and facility inspections to support the analyses.*

**DeCA Response:** DeCA concurs with this recommendation. The Health Affairs economic Analysis Procedures Manual (Draft) is far more than a typical Economic Analysis as we and most of DoD MILCON community define it. It provides detailed procedures for every aspect of project development from data collection, to site visit planning, to forecasting future requirements, to space planning, to defining alternatives, to cost estimating, to conducting a life cycle cost analysis, to writing the report of all the above.

The manual was apparently written as a definitive guide for firms / personnel contracted to conduct this type of economic analysis.

The major steps outlined in this document are very similar to what DeCA is now doing. Each step is outlined below, followed by a brief description of current DeCA procedures.

- Determine what available resources exist to meet the mission
  - Project definition personnel conduct on site needs assessment visits.
    - Data collection prior to visits include obtaining as built drawings, reviewing construction and maintenance history, etc.
- Forecast the total demand
  - Standard sales projections are prepared to determine target size.
  - Changes in demographics, BRAC realigns etc., are researched and impacts determined.
    - Consolidation with other area commissaries is considered.
- Generate alternatives to meet needs
  - Alternatives are developed during the needs assessment visit. Typical alternatives are shown below. Each of these are investigated during the site visit to the degree warranted by Facilities personnel.
    - Status Quo
    - Add/alter
    - New construction
    - Conversion
    - Leasing
    - Extending operational hours
- Determine space requirements of alternatives

## Defense Commissary Agency Comments

---

- The results of the total demand forecast determines the projects design target size. Alternatives are reviewed / developed against that target.
- Develop construction solutions
  - This effort occurs concurrently with the development of the alternatives. Possible project scopes are developed for each alternative in sufficient detail to determine their feasibility.
- Estimate costs
  - Typical costs included in the process are developed or provided by many sources within DeCA. Estimates are based on actual experience or on standard unit costs. They are typically:
    - Construction
    - Equipment & maintenance contracts
    - Utilities
    - Personnel
    - Building maintenance
- Analyze costs (perform the life cycle cost)
  - DeCA uses the U.S. Army Corps of Engineers, Huntsville Division, Automated Economic Analysis Package (ECONPACK) software to conduct life cycle cost comparisons of its commissary projects. This automated process meets or exceeds the requirements of the DoDI 7041.3.
- Recommend solution
  - Recommendations are based on all the accumulated data from the entire process which culminate in the formal Economic Analysis Report. Decisions are based on an analysis of both objective as well as the subjective factors. In many instances the recommended course of action will not be the "least cost alternative".

Completion of the DeCAD 20-1 which will quantify procedures for a complete engineering evaluation and a formal economic analysis will result in adequate documentation to show what alternative solutions DeCA considered and to provide justification and back up to support the recommended alternative.

**DoDIG Finding B, Recommendation 1.** *Determine specific retail and storage square footage allowances necessary to support tobacco product sales in commissaries located at Army and Air Force installations.*

**DeCA Response:** DeCA concurs with this recommendation. As recommended, we have determined specific square footage allowances necessary to support tobacco sales at Army and Air Force

## Defense Commissary Agency Comments

installations. Over the DeCA standard size range the average figure is 1 $\frac{1}{2}$  of the total store area, including both sales and storage areas.

**DoDIG Finding B, Recommendation 2.** Establish commissary requirements at Army and Air Force installations using sales projections that do not include tobacco and troop issue sales.

**DeCA Response:** DeCA concurs with this recommendation. DeCA's sales forecasting procedures, for the purposes of store sizing, have been revised to exclude tobacco and troop issue sales. DeCA has initiated an internal study to develop a more accurate store sizing methodology based on merchandising considerations.

**DoDIG Finding B, Recommendation 3.** Revalidate and resize, as appropriate, planned commissary construction projects using corrected sales information.

**DeCA Response:** DeCA concurs with this recommendation. DASD (PSF&E) was actively involved in the review of DeCA's FY 95 Program, prior to its submission to Congress. Documentation of the PSF&E oversight role has been provided to the DoDIG under separate cover. Additionally, DeCA has completed a review of planned projects to ensure that we had adequately considered feasible alternatives. We have also revised economic analyses, previously performed for the FY 95 program. These have been updated as required to reflect current conditions.

Sales projection methodologies have been a concern of DeCA's for some time. Those concerns prompted an April, 1994 initiative by DeCA to enlist the aid of the Office of Manpower and Economic Analysis, West Point. OEMA was requested to look at the math models used and to look at new or improved methods to project sales. As the DoDIG had expressed concern over sales projections used to size projects at Pensacola and Fort Bragg, those location were chosen for this review effort. The results:

- DeCA now uses standard regression analysis calculations to project sales into the future. Demographic data is still used when changes in the base loading are expected.
- Extensive market research and/or patron surveys are conducted when warranted.
- Based on DoDIG concerns, tobacco and troop issue sales have been deleted from historical sales data.
- Sales projections for over 115 stores have been recalculated.
- FY 95 projects for which DeCA is requesting Congressional release have been reviewed using the new criteria.

## Defense Commissary Agency Comments

Final Report  
Reference

DeCA has reviewed planned projects using corrected sales information, which excludes tobacco and troop issue sales. Project scopes have been adjusted accordingly. A summary of the revisions follows:

**Fort Benning, Add/Alter Commissary:** This project will upgrade the existing commissary and expand the sales area into excess warehouse space. There is no BRAC impact on this project. The scope of this project has been reduced from 90,000 to 80,000 SF due to the revised sizing methodology incorporating recommendations from the DoDIG.

**Fort Leavenworth, Add/Alter Commissary:** This project scope was revised from 70,000 to 60,000 SF because of a decline in sales. There is no BRAC impact on this location.

**Fort Carson, Add/Alter Commissary:** This project will upgrade the existing commissary and expand the sales area into excess warehouse space. The scope of this project has been reduced from 80,000 to 70,000 SF due to the revised sizing methodology incorporating recommendations from the DoDIG.

**Mountain Home AFB, New Commissary:** The project scope has been revised. The sales area has been reduced due to the revised sizing model incorporating recommendations from the DoDIG. The scope includes a larger than standard warehouse area due to the store's remote location and severe winter weather conditions.

**Little Rock AFB, Add/Alter Commissary:** This project will upgrade the existing commissary and expand the sales area into excess warehouse space. The project scope has been tentatively reduced from 80,000 to 60,000 SF due to a concurrent decline in sales and the revised sizing methodology incorporating recommendations from the DoDIG. The project scope is being reviewed to determine if major construction is now required, or if the deficiencies can be corrected through minor construction.

### DeCA Comments on DoDIG Findings.

**FINDING A. Commissary Construction Requirements.** The supporting evidence for this finding was derived from the quick reaction audit reports for Hanscom AFB, NS Guam, NAS Pensacola, Fort Bragg, and Fitzsimons AMC.

### Issue: Overstated Sales Projections (Page 13).

Any projection of future conditions carries the risk of not materializing. DeCA is in the business of selling groceries and we

## Defense Commissary Agency Comments

Final Report  
Reference

have no choice but to project our sales, performance and resource requirements into the future in order to ensure we are ready to provide the service and benefits we are tasked to provide.

The basic methodology used to project commissary sales has been in use for about 20 years. Sales projections are made at the inception of a project and revised many times throughout the project's life. These projections are based on an analysis of historical trends carried out for five years beyond the most recent year of sales data. We compared sales projections against actual sales for 21 newly constructed commissaries which have been in operation at least three full years. Overall, actual sales were 99% of the projection. The range was from a low of 78% to a high of 146%. Only 3 of the 21 projects reviewed failed to achieve at least 85% of the projection.

### Issue: Out-of-Date Personnel Strength (Page 14).

Page 11

Commissary sizing requirements are normally based on sales projections. The sales projection is based upon an analysis of historical sales trends. Personnel strength figures and/or patron surveys are used in conjunction with historical sales when a change is expected in the population base. In those instances, DeCA attempts to obtain the most accurate demographic information possible.

DeCA sources for demographic data are numerous and we are always attempting to obtain more and better sources. Typically these sources may be:

- Services' BRAC and/or Force Structure offices
- Defense Commissary Board, Construction Requirements Review Committee
- Defense Enrollment Entitlement Reporting System (DEERS)
- Installations
- Internal DeCA patron surveys

### Issue: Extended Operating Hours (Page 15)

Page 12

Surcharge funds are intended for use in construction, equipment maintenance, and for the purpose of purchasing certain expendable supplies. Funding extended shopping hours and/or additional shopping days with surcharge funds sets the precedent of shifting part of the burden for labor costs to the commissary patron. Extending operating hours and/or adding days is not a panacea and the implication in this report that it is an all inclusive option is wrong. The single focus argument presented by stating that longer hours produce more sales by flattening peaks is not a stand alone solution. Individual stores may indeed be

## Defense Commissary Agency Comments

Final Report  
Reference

Page 13

available to a broader spectrum of patrons by extending their hours and/or adding shopping days. In looking at alternatives to new construction we examine the option of extended hours and/or additional shopping days, but only implement it when the operational judgement is made that it can produce the desired results, and our work year ceilings will permit it.

**Issue: Renovation of Commissaries (Page 16)**

Although not thoroughly documented, DeCA does look at alternatives to new construction when it was not intuitively obvious that new construction is the only feasible alternative. Comparing alternatives, even at the most basic level, is an inescapable part of project development. DeCA personnel conducting the site visits and making the recommendations on construction alternatives are competent engineers, architects and industrial specialists with many years of commissary construction experience.

There is no consistent criteria within DoD to determine when to build new vs. when to renovate. The commissary is a dynamic, market driven, competitive system, unlike most military construction.

We are now in the process of rewriting and standardizing our procedures and formats for documenting the process of developing and comparing alternative solutions.

Page 13

**Issue: Economic Analysis (Page 17)**

DeCA has improved its documentation of consideration of alternatives to new construction. Detailed information regarding existing assets, physical condition, siting, age, alternatives, costs, etc are now documented in an engineering evaluation (EE) report for each and every project. Alternatives developed in the EE are compared in an economic analysis (EA).

Deleted

**Issue: Consolidating Commissary Operations (Page 18)**

We agree with the findings. The possibility of consolidating operations is one of the first considerations made in determining the necessity for construction. We routinely analyze market shifts, BRAC impacts, proximity of other commissaries, and other demographic factors in judging the course of action. Political reality makes commissary closure a difficult issue.

Revised  
Page 15

**Issue: Validation of Project Requirements (Page 18)**

By and large, the DeCA construction program is "stove piped". Specific project requirements are initially defined at DeCA HQ. DeCA planners determine projected sales, sizes, project scopes,

## Defense Commissary Agency Comments

Final Report  
Reference

costs, alternatives, etc., and have therefore validated each and every project in the earliest planning stage possible. There is no value added or benefit gained from involvement of DASD, PSF&E personnel at any planning stage earlier than when projects are presented to the Defense Commissary Board, Construction Requirements Review Committee two years prior to proposed execution. DeCA planners did and do review and validate the continuing need for commissary projects as changes occur that affect commissary project requirements.

The Fitzsimons and Fort Bragg projects, as well many others, have been reviewed, revalidated, resized, rescoped, delayed, deferred, cancelled or advanced many times throughout their program lives due to continuous checking and rechecking by DeCA facility planners. Planners have always conducted extensive coordination with the Services and in house personnel in order to stay abreast of changes that could impact planned construction. They have requested that several patron surveys be conducted to determine migration patterns and impacts on surrounding stores resulting from BRAC actions.

### Issue: DoDIG Conclusions (Page 20)

Page 16

DeCA has, in the past six months, reevaluated every aspect of the processes by which stores are sized, programmed, validated and reviewed. We have made a great deal of improvement in the areas of standardized reports, quality of information and on site assessment.

Our Engineering evaluations consistently seek to evaluate every aspect and every alternative to new construction. We use a formal economic analysis process to infuse the life cycle cost into our decision making process. Clarifications to our previous analytical methods, such as tobacco sales, expansion of store hours and consolidation of facilities, have been developed.

### Finding B. Commissary Sizing Criteria

#### Issue: Tobacco Sales/Troop Issue Sales/ Overstated Criteria

We have adopted the recommendations in the report. Tobacco sales have been rigorously analyzed and the higher dollar sales which resulted are no longer included in the sizing projections. We have reviewed all our projects, regardless of which programming or design stage they were in, and corrected any overages. Troop issue sales have also been reviewed and have been omitted from any project so impacted.

#### APPENDIX E (Page 38, Chart listing of 14 projects)

Revised  
Page 34

## **Defense Commissary Agency Comments**

---

**Final Report  
Reference**

**Revised  
Page 34**

DeCA does not agree with Appendix E, Finding B and requests that the DoDIG review Appendix E data and conclusions prior to issuance of the final audit report.

## **Audit Team Members**

**This report was prepared by the Logistics Support Directorate, Office of the  
Assistant Inspector General for Auditing, DoD**

**Shelton R. Young  
Michael A. Joseph  
Robert J. Ryan  
Timothy J. Tonkovic  
Scott Grady  
Suzanne Hutcherson  
James R. Knight  
Shari D. Patrick  
Elmer R. Smith  
Eva M. Zahn**

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Replacement Commissary Construction Requirements

**B. DATE Report Downloaded From the Internet:** 01/07/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
**DTIC-OCA, Initials:** \_\_VM\_\_ **Preparation Date** 01/07/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.